

WHAT IS CLAIMED IS:

1. A lighting apparatus, comprising:
A sensor that senses the hue of an ambient light within a space;
a light hue modulating device that generates compensating light to adjust the light to a desired hue within the space regardless of the hue of the ambient light within the space.
2. The lighting apparatus of claim 1, further comprising a control device that controls the hue of light generated by the light hue modulating device in response to the hue of the ambient light.
3. The lighting apparatus of claim 1, further comprising a light source that generates those bandwidths of light that are applied by the light hue modulating device to compensate for each level of ambient light that exists in the space.
4. The lighting apparatus of claim 3, wherein the light source produces white light.
5. The lighting apparatus of claim 1, further comprising a condenser lens that condenses the light directed at the light hue modulating device.
6. The lighting apparatus of claim 1, wherein the light hue modulating device is an optical modulator that can modulate the hue of light.
7. The lighting apparatus of claim 1, wherein the light hue modulating device is a front-lit device.
8. The lighting apparatus of claim 1, wherein the light hue modulating device is a back-lit device.

9. The lighting apparatus of claim 1, wherein the ambient light is produced at least partially by the sun.

10. The lighting apparatus of claim 1, wherein the ambient light is produced at least partially by a light.

11. The lighting apparatus of claim 1, further comprising a sensor/controller mechanism that senses the hue of the ambient light in the space, and thereupon generates the desired compensating light.

12. The lighting apparatus of claim 1, wherein the light hue modulating device includes a first reflector, a second reflector, and a flexure that controls the spacing between the first reflector and the second reflector so that light of a desired wavelength constructively interferes.

13. The lighting apparatus of claim 1, wherein the light hue modulating device includes a Fabry-Perot interference device.

14. A method, comprising:

determining a compensating hue for a compensating light that compensates for a particular ambient light having an ambient hue; and
applying the compensating light to the ambient light to yield a desired total light having a desired hue.

15. The method of claim 14,

wherein said act of applying comprises modulating light provided from a light source, the provided light includes light from each of the primary light colors.

16. The method of claim 14,

wherein applying the compensating light is performed within a space by a hue adjusting lighting system.

17. A lighting system, comprising:

means for controlling and sensing a compensating hue for a compensating light, the compensating hue compensating for a particular ambient light having an ambient hue; and

means for modulating the hue of the compensating light to the ambient light to yield a desired total light.

18. The lighting system of claim 17, wherein the means for modulating the hue includes a plurality of spaced reflectors in which the illumination constructive interferes at the compensating hue.

19. The lighting system of claim 17, wherein the means for modulating the hue includes a front-lit hue modulating device.

20. The lighting system of claim 17, wherein the means for modulating the hue includes a back-lit hue modulating device.

21. The lighting system of claim 17, wherein the means for controlling and sensing a compensating hue includes a feedback loop to compensate for the effectiveness of the means for modulating the hue.